Dongle Operation Manual

Model: SK-7235-R Customer: LITEON Version : 0.3 Issue Date : 07.27.2008

Table of Contents

1. General	2
2. Mechanical Specifications Product Outline	3
2.1 Product Outline	3
3. Electrical Specification	3
4. Radio Feature	5
4.1 Operation procedure	5
4.2 Radio Feature	5
4.3 HID function	6

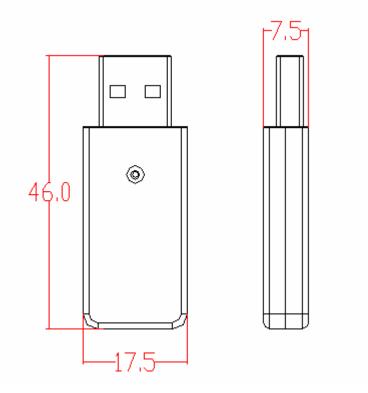
1. General

This is product specification of SK-7235 series radio dongle. It is high quality 2.4GHz keyboard/mouse dongle, supports 78 channels and 65,536 channel ID numbers Nordic chip nRF24L01+ is employ to the product and offers very low power consumption for operation , high radio performance with minimum operation range of 10 meters.

The product supports HID input device to receive data from keyboard and mouse. USB dongle receiver to be used as a communication interface device between PC computer and wireless device. This dongle is HSF product.

2. Mechanical Specifications Product Outline

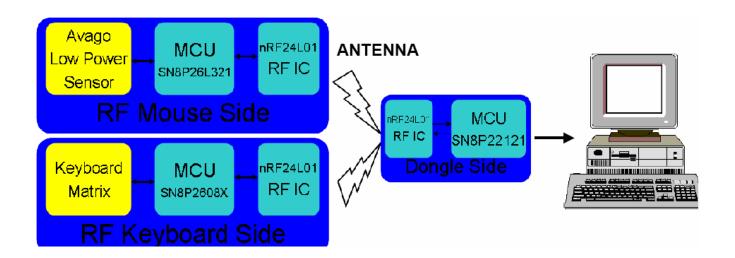
2.1 Product Outline



2.1.1 Dimensions and Weight Dimensions: Length: 146.0 ± 0.2 mm Width: 17.5 ± 0.2 mm Height: 7.5 ± 0.2 mm Weight: 6.5 ± 1 g

3. Electrical Specification

Functional Block diagram of RF Communication system



Main Feature.

- Nordic 78 RF channels 2.4GHz two way.
- 65,536 ID for radio communication.
- Maximum 2M transmission baud rate.

Low Speed USB Specification Compliance., meets Universal Serial Bus Specification Version 1.1

4. Radio Feature

4.1 Operation procedure

The product needs to make pairing with USB dongle before normal application.

In general we can use the product directly by the user because the pairing process has been done at manufacturer site. However, the pairing process needs to be done if there is no response from mouse(KB).

* How to make pairing (step by step as below process) by user:

- 1. Insert two AA batteries to the RF Mouse (KB), and close the battery door.
- 2. Plug in the Receiver to the USB port of P.C. and the Access LED will to light about 2 seconds.
- 3. Press the ID connect button of dongle and the Access LED will to light about 15 seconds..
- 4. Press the ID connect button of RF Mouse (KB) for pairing with the dongle within 15 seconds.
- 5. The Access LED will go off and RF Mouse (KB) is ready. If Access LED is still blinking, please repeat the above procedure 1 to 4 again.

4.2 Radio Feature

*Table-1 Parameter of radio part

Items	Keyboard	Mouse
	Specifications	Specifications
Frequency Range	2.402~2.479GHz	2.402~2.479GHz
	78 channel frequency hopping	78channel frequency hopping
Modulation	GFSK	GFSK
Channel	78channels	78channels
Channel I.D	16bits →65,536	16bits →65,536
Operation Voltage	4.4~5.5V	4.4~5.5V
Rx Sensitivity	-85dBm	-85dBm
Transmission rate	2Mbps	2Mbps
TX FM frequency deviation	+/- 320 kHz	+/- 320 kHz
Frequency tolerance	+/- 30ppm	+/- 30ppm

4.3 HID function

This product offer receiving the data from keyboard and mouse. It in connection with PC via USB interface.

The USB interface meets the USB version 1.1 specifications.

Note:

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the installation. , May cause harmful interference to radio communication. However, there is no guarantee that interference

Will not occur in a particular installation. if this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna

-Increase the separation between the equipment and receiver

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected -Consult the dealer or an experienced radio / TV technician for help

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions

(1) This device may not cause harmful interference and

This device must accept any interference received, including interference that may cause undesired operation

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.